

## REMARKS

In a non-final Office Action mailed November 17, 2006, the Examiner rejected the pending claims under 35 U.S.C. § 102(e). The Examiner confirmed by telephone on February 19, 2007 that the statement of pending claims in item 2 of the Detailed Action is correct, even though a different statement appears in the Office Action Summary. Applicants respond to the rejection below. In view of the arguments presented herein, Applicants respectfully request reconsideration of the merits of this application.

### Restriction Requirement

The Examiner acknowledged Applicants' provisional election of Group I for further prosecution, with traverse, but maintained and made final the requirement for restriction. The Examiner's response to the misclassification of Claim 48 in Groups V and VI is not fully responsive, as the Examiner proposes a new Group VII. This is not appropriate for two reasons: (i) a Group VII has already been defined, and (ii) Claim 48 could be placed into one of Group V and VI. Clarification is respectfully requested in the next correspondence from the Examiner. Groups other than Group I stand withdrawn from prosecution, as do claims that recite non-elected sequences.

### Rejections Under 35 U.S.C. § 102(e)

Claims 1-2, 7, 10, 13, 16-20, 23, 25 and 27-29 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,342,357 to Splawski & Keating. The Examiner alleges that Splawski & Keating anticipate the pending claims by disclosing a nucleic acid (i.e. SEQ ID NO:4 of Splawski & Keating) that encodes a SCN5A sodium channel having an alteration at amino acid 552 of SEQ ID NO:8 of the above-identified application. Applicants respectfully disagree.

Contrary to the Examiner's assertion that all elements and limitations are disclosed in Splawski & Keating, Applicants submit that Splawski & Keating is an improper reference because it does not disclose every limitation and element as recited in the pending claims. Specifically, MPEP § 2131 provides:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (noting that the identical invention must be shown in as complete detail as is contained in the claims) (emphasis added); *Richardson v. Suzuki Motor Co.*, 868 F.2d

1226, 1236, 9 USPQ2d 1913, 1920 (Fed.Cir. 1989) (noting that the elements must be arranged as required by the claim).

Splawski & Keating nowhere disclose SEQ ID NO:8. As an aside, Applicants point out that the elected sequence is polynucleotide SEQ ID NO:7 (which is a sequence that can encode polypeptide SEQ ID NO:8). In fact, the Examiner even notes that the two sequences (SEQ ID NO:4 of Splawski & Keating and SEQ ID NO:8 of the above identified application) are only 99.5% identical. 99.5%, however, does not meet the requirements set forth in MPEP § 2131. As shown below in Table 1, the two sequences vary at ten (10) residues. Applicants note that the numbering used in Table 1 is consistent with paragraph [0031] of the specification.

Table 1: Comparison of Amino Acid Sequences of SEQ ID NO:4 of Splawski & Keating with SEQ ID NO:8 of the Above-Identified Application.

Amino Acid Residue	SEQ ID NO:4 of Splawski & Keating	SEQ ID NO:8 of Above-Identified Application
120	Val	Ile
180	Ala	Gly
552	Arg	Gly
558	His	Arg
987	His	Gln
1027	Gln	Arg
1077	Gln	Deleted
1085	Trp	Gly
1087	Arg	Glu
1088	Gly	Ala

Table 1 shows that residues 120, 180, 558, 1085 and 1088 are conservative substitutions, that residues 552, 987, 1027 and 1087 are non-conservative substitutions, and that residue 1077 is a deletion (which means that Splawski & Keating's polypeptide has an extra amino acid when compared to SEQ ID NO:8). Consequently, the two polypeptides differ at ten (10) residues. More importantly, Splawski & Keating's polypeptide differs at residues 558 (His not Arg), 1027 (Gln not Arg) and 1077 (Gln not deleted), each of which are specifically noted in the claims. In view of these differences at the polypeptide level, Applicants maintain that Splawski & Keating do not disclose the polynucleotides of Claim 1. and that Splawski & Keating cannot anticipate the pending claims. The Examiner is reminded that where, as here, specific differences in polynucleotides are relevant to the invention, it is insufficient to cite similar polynucleotides that lack the specified attributes of the claimed polynucleotides. In view of these remarks, Applicants respectfully request reconsideration of this rejection as applied to 1-2, 7, 10, 13, 16-20, 23, 25 and 27-29.

Additional Remarks


Applicants add new Claim 51. New Claim 51 depends from Claim 28 and recites that the polynucleotide of Claim 28 is SEQ ID NO:7.

Fees

No fee is believed due in connection with this submission. However, if a fee is due, in this or any subsequent response, please charge the fee to Deposit Account No. 17-0055.

Likewise, no extension of time is believed due, but should any extension be required in this or any subsequent response, please consider this to be a petition for the appropriate extension of time and a request to charge the petition fee due to the same Deposit Account.

Respectfully submitted,



Bennett J. Berson  
Reg. No. 37,094  
Attorney for Applicants  
QUARLES & BRADY LLP  
P.O. Box 2113  
Madison, WI 53701-2113

TEL (608) 251-5000  
FAX (608) 251-9166